Amendments to the Claims:

Please amend claims 1-6, 8-13, and 15-20 as shown in the LISTING OF CLAIMS

below. Claims 7, 14, and 21 remain unchanged. The LISTING OF CLAIMS will

replace all prior versions, and listings, of claims in the present application.

Listing of Claims:

1. (currently amended) A method for representing an application programming

    interface (API) definition for an object-oriented library, said method comprising:

    creating a list of public elements in said object-oriented library, each of said public

        elements including a sublist of all public hierarchically-related elements for that

        are a parent of the element; and

    storing said list.

2. (currently amended) The method of claim 1 wherein

    said object-oriented library is a Java™ package;

    said public elements comprise classes and interfaces; and

    said public hierarchically-related elements comprise public superclasses and public

        superinterfaces of said classes and said interfaces.

3. (currently amended) A method for representing an application programming

    interface (API) definition for an object-oriented library, said method comprising:

creating a public list including all public classes and interfaces ~~in~~ defined in said

object-oriented library, said public list including a class sublist for each of said

public classes, each said class sublist including all direct and indirect

superclasses of a class; and

storing said list.

4. (currently amended) The method of claim 3 wherein said object-oriented library is a

Java™ package.

5. (currently amended) A method for determining a program hierarchy, said method

comprising:

receiving an application programming interface (API) definition file for an object-

oriented library, said API definition file including a list of public elements in

said object-oriented library, each of said public elements including a sublist of

all public hierarchically-related elements ~~for~~ that are a parent of the element; and

indicating a first public element is a direct parent of a second public element when

said first public element is represented in the sublist for said second public

element and said first public element is not represented in the sublist for any

other public element listed in the sublist for said second public element.

6. (currently amended) The method of claim 5 wherein

said object-oriented library is a Java™ package;

said public elements comprise classes and interfaces; and

said public hierarchically-related elements comprise public superclasses and public

superinterfaces of said classes and said interfaces.

7. (original) The method of claim 5, further comprising

comparing a first program hierarchy reconstructed from a first API definition file

with a second program hierarchy reconstructed from a second API definition

file; and

indicating an error when said first program hierarchy is inconsistent with said second

program hierarchy.

8. (currently amended) A program storage device readable by a machine, embodying a

program of instructions executable by the machine to perform a method to represent

an application programming interface (API) definition for an object-oriented library,

the method comprising:

creating a list of public elements in said object-oriented library, each of said public

elements including a sublist of all public hierarchically-related elements for that

are a pareent of the element; and

storing said list.

9. (currently amended) The program storage device of claim 8 wherein

said object-oriented library is a Java™ package;

said public elements comprise classes and interfaces; and

SUN-P4175
(811173-000094)

said public <u>hierarchically</u>-related elements comprise public superclasses and public superinterfaces of said classes and said interfaces.

10. (currently amended) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method to represent an application programming interface (API) definition for an object-oriented library, the method comprising:

creating a public list including all public classes and interfaces in defined in said <u>object-oriented</u> library, said public list including a class sublist for each of said public classes, each said class sublist including all direct and indirect superclasses of a class; and

storing said list.

11. (currently amended) The program storage device of claim 10 wherein said <u>object-oriented</u> library is a Java™ package.

12. (currently amended) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method to determine a program hierarchy, the method comprising:

receiving an application programming interface (API) definition file for an object-oriented library, said API definition file including a list of public elements in said <u>object-oriented</u> library, each of said public elements including a sublist of all public <u>hierarchically-re</u>lated elements for <u>that are a parent of</u> the element; and

6

indicating a first public element is a direct parent of a second public element when

said first public element is represented in the sublist for said second public

element and said first public element is not represented in the sublist for any

other public element listed in the sublist for said second public element.

13. (currently amended) The program storage device of claim 12 wherein

said object-oriented library is a Java™ package;

said public elements comprise classes and interfaces; and

said public hierarchically-related elements comprise public superclasses and public

superinterfaces of said classes and said interfaces.

14. (previously presented) The program storage device of claim 12 wherein said method

further comprises:

comparing a first program hierarchy reconstructed from a first API definition file

with a second program hierarchy reconstructed from a second API definition

file; and

indicating an error when said first program hierarchy is inconsistent with said second

program hierarchy.

15. (currently amended) An apparatus for representing an application programming

interface (API) definition for an object-oriented library, said apparatus comprising:

means for creating a list of public elements in said <u>object-oriented</u> library, each of

said public elements including a sublist of all public <u>hierarchically-</u>related

elements ~~for~~ <u>that are a parent of</u> the element; and

means for storing said list.

16. (currently amended) The apparatus of claim 15 wherein

said <u>object-oriented</u> library is a Java™ package;

said public elements comprise classes and interfaces; and

said public <u>hierarchically-</u>related elements comprise public superclasses and public

superinterfaces of said classes and said interfaces.

17. (currently amended) An apparatus for representing an application programming

interface (API) definition for an object-oriented library, said apparatus comprising:

means for creating a public list including all public classes and interfaces ~~in~~ defined

in said <u>object-oriented</u> library, said public list including a class sublist for each

of said public classes, each said class sublist including all direct and indirect

superclasses of a class; and

means for storing said list.

18. (currently amended) The apparatus of claim 17 wherein said <u>object-oriented</u> library

is a Java™ package.

8

19. (currently amended) An apparatus for determining a program hierarchy, said

apparatus comprising:

means for receiving an application programming interface (API) definition file for an

object-oriented library, said API definition file including a list of public

elements in said <u>object-oriented</u> library, each of said public elements including a

sublist of all public <u>hierarchically</u>-related elements ~~for~~ <u>that are a parent of</u> the

element; and

means for indicating a first public element is a direct parent of a second public

element when said first public element is represented in the sublist for said

second public element and said first public element is not represented in the

sublist for any other public element listed in the sublist for said second public

element.

20. (currently amended) The apparatus of claim 19 wherein

said <u>object-oriented</u> library is a Java™ package;

said public elements comprise classes and interfaces; and

said public <u>hierarchically</u>-related elements comprise public superclasses and public

superinterfaces of said classes and said interfaces.

21. (previously presented) The apparatus of claim 19, further comprising

means for comparing a first program hierarchy reconstructed from a first API

definition file with a second program hierarchy reconstructed from a second API

definition file; and

means for indicating an error when said first program hierarchy is inconsistent with

said second program hierarchy.